



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/575,299

01/08/2007

Frederic Noelle

40211

9548

116 7590 11/28/2007
PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

MALEKZADEH, SEYED MASOUD

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/575,299	NOELLE, FREDERIC	
	Examiner	Art Unit	
	SEYED M MALEKZADEH	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/12/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "upper run (9)" (page 3, line 39) and "applicator" (page 4, line 19). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Priority

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-7, 9, and 11 are rejected under 35 U.S.C. 102 (b) as being anticipated by Vuillaume et al (US 2002/0157766).

As to claim 6, Vuillaume et al ('766) discloses an assembly for producing non-woven webs of "spun-bond" type wherein assembly includes a spun-bond tower (1) in which deposit filaments (3) as a web onto a conveyor belt (5) and a device for consolidating the web, by water jets (14, 15, and 16), characterized by a suction unit (25) as a moisture-expressing means in the direction in which the web moves, of the consolidation device and by an applicator unit (9) for applying a second sheet (V2) of discontinuous fibers product into the web. (See paragraphs [0049], [0051], [0054], [0062], [0065, and [0072], and figures 1-2)

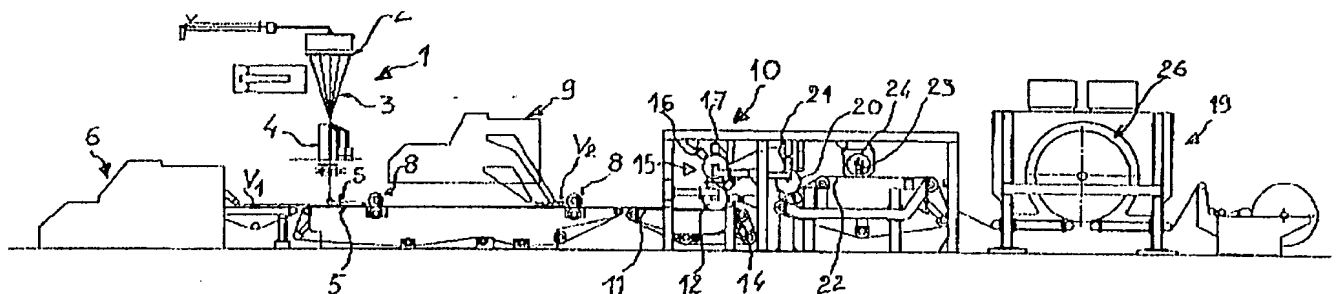
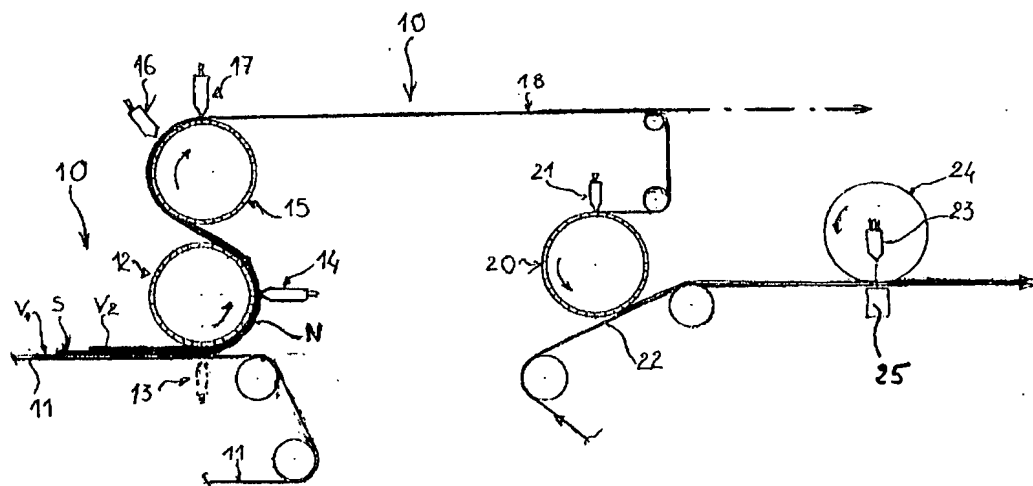


FIG.1

FIG. 2



Further, as to claim 7, Vuillaume et al ('766) teach the expressing means include a vacuum device for subjecting the web to a suction effect. (See paragraph [0072])

As to claim 9, Vuillaume et al ('766), also disclose the expressing means include a device (19) for drying the web. (See paragraph [0026] and [0068])

As to claim 11, Vuillaume et al ('766) teach the applicator unit (9) is a device for applying discontinuous product fibers onto the surface of the "spunbond" web in which the discontinuous fibers are longitudinal bands. (See paragraph [0054])

The prior art, thus, meets all the claim limitations, and therefore, Vuillaume et al ('766) anticipates claims 6-7, 9, and 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vuillaume et al ('766) in view of Vuillaume et al. (US 2002/0168910)

Vuillaume et al ('766) discloses all the structural limitations of an apparatus for the continuous production of a non-woven product as discussed above in rejection of claims 6-7, 9, and 11, however, fail to teach the vacuum device for expressing means provide a suction effect with a vacuum pressure of between 40 milli-bar to 700 milli-bar.

In the analogous art, Vuillaume et al ('910) teaches an apparatus for production of a non-woven web composite on a production line in which the apparatus include an expressing conveyor (16), on which it is expressed by a suction box in which there is a vacuum of 400 mili-bar. (See paragraph [0064] and figure 1)

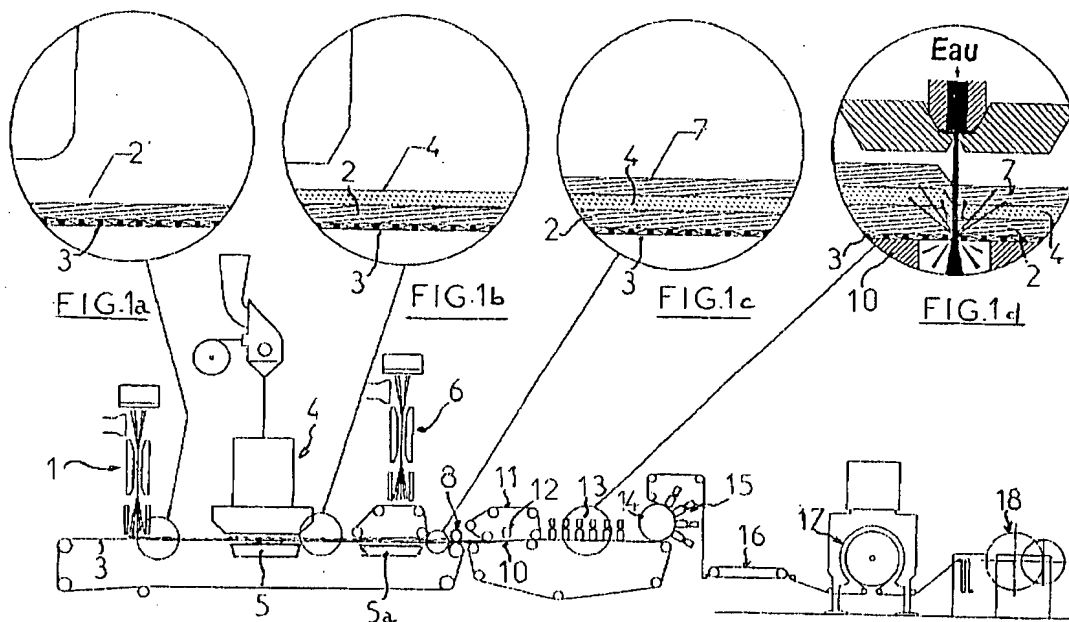


FIG. 1

Further, Vuillaume et al ('910) disclose the advantages of providing an expressing conveyor in which apply vacuum to the non-woven web in order to improve mechanical properties and flexibility of the non-woven web product while retaining the appearance of the non-woven web. (See paragraph [0014])

Therefore, it would have been obvious for one of ordinary skill in the art at the time of applicant's invention to modify the apparatus of Vuillaume et al ('766) by providing a vacuum with a pressure of 400 mili-bar for the expressing means of non-woven web in order to improve mechanical properties and

flexibility of the non-woven web product, as suggested by
Vuillaume et al ('910).

Claim 10 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Vuillaume et al ('766) in view of Radwanski et
al. (US 4,939,016).

Vuillaume et al ('766) discloses all the structural
limitations of an apparatus for the continuous production of a
non-woven product as discussed above in rejection of claims 6-7,
9, and 11, however, fail to teach the product applicator is a
foam applicator or a lick-roll applicator.

In the analogous art, Radwanski et al. ('016) disclose an
apparatus for production of a composite non-woven elastomeric
web material in which the apparatus include an extruder (6), a
belt (30), and a picker or lickerin roll (14). (See lines 13-22,
column 7 and figure 1)

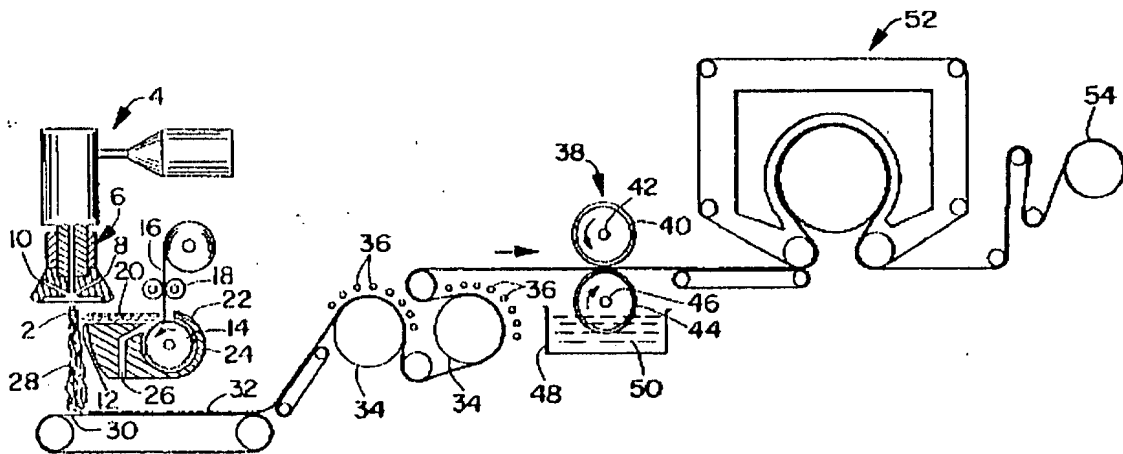


FIG. 1

Further, Radwanski et al. ('016) teach staple fibers (12) can be carded and also readily delivered as a web to the picker or lickerin roll (14) and thus delivered in the formed web. This allows use of high line speeds and provides a web having isotropic strength properties. (See lines 30-34, column 7)

Therefore, it would have been obvious for one of ordinary skill in the art at the time of applicants' invention to modify the apparatus of Vuillaume et al ('766) by providing a lick-roll applicator as a product applicator in order to improve the efficiency of the apparatus and also to improve strength properties of the Radwanski et al. ('016), as suggested by Radwanski et al. ('016).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on (571) 272-1316. The fax number for the organization where this application or proceeding is assigned is 571-272-8300.

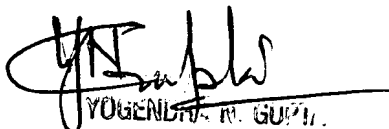
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Application/Control Number:
10/575,299
Art Unit: 1791

Page 12

access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free). If you would
like assistance from a USPTO Customer Service Representative or
access to the automated information system, call 800-786-9199
(IN USA OR CANADA) or 571-272-1000.

SMM


YOGENDRA M. GUPTA
SUPERVISORY PATENT EVALUATOR
TECHNOLOGY CENTER 1700